What is claimed is:

1. A method for detecting a geographical origin of a fresh commodity comprising the steps of:

generating a plurality of neural network models, each having as a training set a data set from a plurality of samples of a commodity of known origins analyzed for a plurality of elemental concentrations using an analytical method selected from a group consisting of inductively coupled plasma–optical emission spectrometry and inductively coupled plasma–mass spectrometry;

presenting to each neural network model for classification a test data set from a plurality of samples of a commodity of unknown origins analyzed for the plurality of elemental concentrations;

employing a bootstrap aggregating strategy to combine the results of the classifications for each sample in the test data set made by each neural network model; and

determining from the bootstrap aggregating strategy a final classification of each sample in the test data set indicative of a geographical origin of the commodity.

2. The method recited in Claim 1, wherein the test set and the training set comprise approximately equal-sized sets.

3. The method recited in Claim 1, wherein the bootstrap aggregating strategy employing step and the final classification determining step comprise polling the classification results and selecting a classification value having a majority in the polling results as the final classification.

4. The method recited in Claim 1, wherein the sample analyzing step comprises the steps of:

liquefying at least a portion of each sample of the fresh commodity; and

performing the selected analytical method on each liquefied commodity portion.

5. The method recited in Claim 4, wherein the analytical method performing step comprises determining concentrations of a plurality of trace elements.

6. The method recited in Claim 5, wherein the plurality of trace elements comprise trace metals.

7. The method recited in Claim 5, wherein the concentration determining step comprises normalizing for moisture content to reduce intersample variability.

8. The method recited in Claim 1, further comprising the step, prior to the generating step, of screening out elements from the test and the training sets having elemental concentrations below an experimental detection limit.

9. The method recited in Claim 1, wherein the fresh commodity comprises potato.

10. The method recited in Claim 9, wherein the elemental concentrations comprise concentrations of barium, cadmium, calcium, chromium, copper, iron, potassium, magnesium, manganese, nickel, phosphorus, sulfur, strontium, and zinc.

11. A system for detecting a geographical origin of a fresh commodity comprising:

software means for generating a plurality of neural network models, each having means for receiving as a training set a data set from a plurality of samples of a commodity of known origins analyzed for a plurality of elemental concentrations using an analytical method selected from a group consisting of inductively coupled plasma–optical emission spectrometry and inductively coupled plasma–mass spectrometry;

means for presenting to each neural network model for classification a test data set from a plurality of samples of a commodity of unknown origins analyzed for the plurality of elemental concentrations;

a bootstrap aggregating software routine for combining the results of the classifications for each sample in the test data set made by each neural network model; and

a poller for determining from the bootstrap aggregating strategy a final classification of each sample in the test data set indicative of a geographical origin of the commodity.

12. The system recited in Claim 11, further comprising means for generating the test data set and the training data set.

13. The system recited in Claim 12, wherein the means for generating the test data set and the training data set comprise a trace element analyzing system.

14. A method for detecting a geographic origin of a fresh potato comprising the steps of:

collecting a chemical composition profile of a sample of a fresh potato of unknown origin using an analytical method selected from a group consisting of inductively coupled plasma–optical emission spectrometry and inductively coupled plasma–mass spectrometry;

comparing the profile with a data set comprising a plurality of chemical composition profiles collected from samples of fresh potatoes of known origin; and

determining from the comparison a likely origin of the sample of unknown origin.

15. The method recited in Claim 14, wherein the chemical composition profile comprises a trace element analysis.

16. The method recited in Claim 15, wherein the trace element analysis includes at least one element selected from the group consisting of barium, chromium, copper, iron, manganese, and zinc.

17. The method recited in Claim 16, wherein the trace element analysis further at least one element selected from the group consisting of cadmium, cobalt, molybdenum, nickel, lead, vanadium, gallium, and selenium.

18. The method recited in Claim 17, wherein the element group further consists of calcium, cadmium, potassium, magnesium, phosphorus, sulfur, and strontium.

19. The method recited in Claim 18, wherein the comparing step comprises employing a multivariate classification technique.

20. The method recited in Claim 14, wherein the comparing and the determining steps comprise subjecting the profile to a multivariate pattern recognition algorithm.

21. The method recited in Claim 20, wherein the subjecting step further comprises applying an artificial neural network to the profile.

22. The method recited in Claim 21, wherein the neural network comprises a feed-forward back-propagation neural network.

23. A system for analyzing a geographic origin of a fresh potato comprising:

means for collecting a first trace element profile of a sample of fresh potato of unknown origin using an analytical method selected from a group consisting of inductively coupled plasma–optical emission spectrometry and inductively coupled plasma–mass spectrometry;

a second trace element profile for a sample of a fresh potato of known origin;

means for comparing the first trace element profile with the second trace element profile; and

means for determining from the comparing means whether a geographic origin of the unknown sample is likely to be the same as the known origin.

24. The system recited in Claim 23, wherein:

the second trace element profile comprises a dataset of a plurality of trace element profiles;

the comparing means comprises means for comparing the first trace element profile with each of the dataset profiles; and

the determining means comprises means for determining which of the dataset profiles most closely matches the first trace element profile.